REMARKS

Claims 37 and 39 -56 are presently pending in the Application and claims 37-39, 41-44 and 48-55 are rejected under 35 U.S.C. § 103(a) over DE `362 in view of Hellwig et al. `487, claims 45-47 rejected under 35 U.S.C. § 103(a) over DE `362 in view of Hellwig et al `487 and in further view of McKinney et al. `645, and claims 40 and 56 are rejected under 35 U.S.C. § 103(a) over DE `362 in view of Hellwig et al. `487 and further in view of Bussiere `371. The Applicant acknowledges and respectfully traverses the raised rejections in view of the following remarks.

First, considering the requirements for establishing grounds for rejection under 35 U.S.C. § 103, and as discussed in the previous Responses, it is well established that in order to properly support a rejection under 35 U.S.C. § 103(a), the references must provide some express or inherent disclosure, or motivation which would lead a person of skill in the art to combine the references as suggested by the Examiner.

The Examiner is first reminded that when rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of presenting a prima facie case of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Only if that burden is met, does the burden of coming forward with evidence or argument shift to the Applicant. Id. Further, "[a] prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA) 1976)). If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

It is also well established that whether references are analogous or not is not sufficient to support a prima facie case of obviousness by combination of the teachings of the references. Even if the references are analogous, that is not in and of itself a sufficient legal support for obviousness. It is well settled, as noted by the following case law citations, that references, whether analogous or not, must contain some teaching, suggestion and/or disclosure which would lead one of skill in the art to combine the references.

> Undoubtedly, these patents disclose, individually, the separate elements or components of the invention. However, none of them teaches or even suggests combining these various elements or components in the manner taught by Silman, and it is well settled that references may not be combined where there is no suggestion in any of the references that they can be combined to meet the

recitations of the claims. United Merchants and Manufacturers, Inc. v. Commissioner of Patents, 139 USPQ 199, 200 (DC, District of Columbia 1963).

This legal concept has also been long sustained by the Federal Circuit, "[t]he lesson of this case appears to be that prior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings." In re Sernaker, 702 F.2d 989, 995-6, 217 USPQ 1, 6 (CAFC 1983).

In order to properly support a rejection under 35 U.S.C. § 103(a), therefore, the references must either provide some express or inherent disclosure or motivation which would lead a person of skill in the art to combine the references, as suggested by the Examiner, or, where the combined references do not teach either expressly or impliedly the combination, the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

Therefore considering the rejections of the claims over the applied art and first considering the present invention as recited in independent claims 37, 55 and 56, it will be noted that claims 37, 55 and 56 are amended to more explicitly recite the aspects by which the present invention is distinguished over the applied prior art. It will also be noted that all of these amendments are fully supported by the disclosure of the present Application as originally filed, so that these amendments to not add any new matter.

As recited in amended independent claims 37, 55 and 56, the present invention is directed to thermal camouflage sheet or fabric for covering a heat source against identification in a thermal image. According to the present invention as recited in claim 37, and in claims 55 and 56, the camouflage sheet comprises a base textile made of a glass filament and having an inner side facing toward the heat source and an outer side facing away from the heat surface. The outer side of the base textile has a first visual-optical camouflage surface coating consisting of polyurethane or polyvinylidene fluoride (PVDF) and containing color pigments with the remission values of the color pigments being in the range of visual-optical camouflage.

As described in the specification, the use of polyurethane or polyvinylidene fluoride (PVDF) in the outer visual-optical camouflage coating reduces the "glisten" of the outer side of the camouflage sheet, that is, the tendency of the outer side of the sheet to reflect light, thereby allowing the outer side of the sheet to more closely match the color and reflectivity of the surroundings or an overlying camouflage netting. Also as described in the specification, the visual-optical camouflage surface coating may be applied either by directly painting the

coating onto the base textile or by forming the coating as a layer separately from the sheet and directly transferring the coating onto the sheet, such as by a transfer printing process.

The inner side of the base textile, in turn, has a second thermal camouflage surface coating consisting of a silicone elastomer or a polyurethane, or both, and containing aluminum powder. One side of the second thermal camouflage surface coating faces toward the heat source and is smooth relative to the texture of the inner side of the base textile, thereby increasing a thermal reflectivity of the thermal camouflage sheet toward the heat source and improving the thermal camouflage effects of the sheet. As described in the specification, the thermal camouflage surface coating is preferably formed separately from the base textile and subsequently transferred onto the base textile by, for example, a transfer printing process. The direct transfer of a separately formed thermal camouflage coating onto the base textile allows the formation of a smoother surface on the thermal camouflage coating because the texture of the thermal camouflage coating is not effected by the texture of the base textile when the thermal camouflage coating is formed.

Turning now to the rejection of claims 37-39, 41-44 and 48-55, under 35 U.S.C. § 103(a), over DE `362 in view of Hellwig et al. `487, and first considering DE `362, this reference relates to a camouflage fabric or sheet comprised of a glass fiber base textile having an outer side coating comprising a silicon elastomer containing metallic pigments to provide visual-optical camouflage and an inner side coating comprised of a silicon elastomer containing thermally reflective powdered aluminum to provide thermal camouflage. It is therefore apparent, as has been discussed in previous responses, that there are a number of fundamental differences and distinctions between the present invention as recited in claims 37, 55 and 56 and the teachings of DE `362.

For example, DE `362 specifically discloses that the inner and the outer coatings should comprise silicon elastomers, and only silicon elastomers, for various reasons. DE `362 does not even mention other materials that could be used for the inner and the outer coatings, such as polyurethane polymers of polyvinylidene fluoride (PVDF)..

In complete and fundamental contrast from DE `362, the present invention as recited in claims 37, 55 and 56 specifically recite that the outer visual-optical camouflage coating consists of, that is, is specifically limited to being made of, either polyurethane or polyvinylidene fluoride (PVDF), which has very different visual properties from silicon elastomers. More specifically, and as taught specifically by the present Application, polyurethane or polyvinylidene fluoride (PVDF) materials have significantly reduced reflectivity in the visual portions of the spectrum, particularly when compared to the reflectivity characteristics of silicon

elastomers. The present invention states that, for this reason, polyurethane polymers or polyvinylidene fluoride (PVDF) are to be used in a camouflage sheet or fabric rather than silicon elastomers. With respect to this aspect of the present invention, therefore, the teachings of DE `362 are directly contrary to the present invention as recited in claims 37, 55 and 56.

In further distinction between the presently claimed invention and DE `362, claims 37, 55 and 56 recite that the camouflage sheet or fabric will have a second thermal camouflage surface coating consisting of a silicone elastomer or a polyurethane, or both, and containing aluminum powder. As recited in the claims, one side of the thermal camouflage coating faces toward the heat source and is smooth relative to the texture of the inner side of the base textile, thereby increasing the thermal reflectivity of the thermal camouflage sheet toward the heat source and improving the thermal camouflage effects of the sheet. As described in the specification, a relatively smooth surface on the thermal camouflage coating is preferably achieved by forming the thermal camouflage coating as a layer separately from the base textile and subsequently transferring the thermal camouflage coating onto the base textile by, for example, a transfer printing process. The direct transfer of a separately formed thermal camouflage coating onto the base textile allows the formation of a smoother surface on the thermal camouflage coating because the texture of the thermal camouflage coating is not effected by the texture of the base textile when the thermal camouflage coating is formed.

The present invention, as recited in claims 37, 55 and 56, is therefore further fundamentally distinguished over and from the teachings of DE `362 because DE `362 does not even mention or consider in any way the effects of the thermal reflectivity of the thermal camouflage coating of the DE `362 fabric. For this reason, DE `362 has no teachings or suggestions regarding providing the thermal camouflage coating with a smoother, more reflective surface, or any motivation for doing so.

It is, therefore, the Applicant's position that the present invention as recited in claims 37, 55 and 56 is fully and patentably distinguished over and from the teachings of DE `362 under the requirements and provisions of 35 U.S.C. § 103 and 35 U.S.C. § 102 for at least the above discussed reasons.

Next considering Hellwig et al. `487, it must first be noted that Hellwig et al. `487 is the equivalent of United States Application No. 10/622,820 which was published in English in the United States on August 5, 2004 as Patent Application Publication No. US 2004/0152385. The United States Application corresponding to Hellwig `487, hereafter referred to as Hellwig `820, with therefore be referred to for the purposes of the following discussions in place of Hellwig et al. `487.

Hellwig et al. `820 describes a camouflage tarpaulin comprising a glass fabric base textile (1) having an outer visual camouflage coating (5) formed of a polyurethane polymer or silicon elastomer compounded with metallic pigments (6) providing reflectance values in the range for visual and infrared camouflage. The inner side of the base textile (1) is covered with a free-standing layer (2) of polyester film that is adhered to the base textile (1) by a polyurethane of silicone layer (4) and that is coated with a vapor-deposited thermally reflective coating (3), such as vapor deposited aluminum. It is, therefore, apparent that there are a number of fundamental distinctions and differences between the present invention and Hellwig et al. `820.

First, the presently claimed invention distinguishes between the visual-optical reflectivity properties of polyurethane polymers and those of silicon elastomers and claims 37, 55 and 56 specifically require the use of either polyurethane or polyvinylidene fluoride (PVDF) because of their significantly lower reflectivity by comparison with silicon elastomers, and teaches against the use of silicon elastomers for visual-optical camouflage coatings.

Hellwig et al. `820, however, and in contrast with the present invention, teaches that the outer visual camouflage coating (5) may be formed of either a polyurethane polymer or silicon elastomer. Hellwig et al. `820 thereby treats polyurethane polymers and silicon elastomers as equivalent materials for the purposes and functions of an outer visual camouflage coating. It must also be noted that Hellwig et al. `820 does not discuss or even mention the differences in visual-optical reflectivity between polyurethane polymers and silicon elastomers, does not distinguish between polyurethane polymers and silicon elastomers as regards their reflectivity properties or their uses as a visual-optical camouflage coating, and does not even discuss the effects of the varying reflectivity of different materials on the camouflage properties of a visual-optical camouflage coating.

It is, therefore, apparent that Hellwig et al. `820 provides absolutely no motivation for the use of a polyurethane polymer rather than a silicon elastomer in a visual-optical camouflage coating other than merely mentioning the polyurethane polymer is a possible alternative material. It must also be carefully noted that, in fact, the only positive teaching and actual motivation for using polyurethane polymers in a visual-optical camouflage coating are found in the present invention.

Further in this regard, it must be noted that the present invention, and only the present invention, specifically teaches that silicon elastomers should not be used in a visual-optical camouflage coating and provides a motivation as to why silicon elastomers should not be used for these purposes. It is, therefore, apparent that the present invention, in fundamental contrast

from and in contradiction to Hellwig et al. `820, provides both a strong teaching against the use of silicon elastomers and a clear motivation as to why silicon elastomers should not be used in visual-optical camouflage coatings.

Still further in this regard, it must be noted that the present invention teaches, and specifically claims 37, 55 and 56, that polyvinylidene fluoride (PVDF) may be used as an equivalent to polyurethane polymer because polyvinylidene fluoride (PVDF) has reflectivity properties similar to those of polyurethane polymers and, more specifically, that the reflectivity of polyvinylidene fluoride (PVDF) is likewise much lower than that of silicon elastomers. The present invention as described and as recited in the claims thereby clearly evaluates the materials for the coatings, and in particular the visual-optical camouflage coating, on the basis of their reflectivity in the visual ranges. Hellwig et al. `820 does not even mention polyvinylidene fluoride (PVDF) or any other material as an equivalent to either polyurethane polymers or silicon elastomers, which clearly illustrates that Hellwig et al. `820, in direct and fundamental contrast from the present invention as recited in the claims, does not even consider the reflectivity properties of the coating material. As such, Hellwig et al. `820's mention of polyurethane polymer as a possible coating material is completely unrelated to the present invention's use of polyurethane polymer, which is based upon the reflectivity properties of polyurethane polymers.

In brief, therefore, Hellwig et al. `820's teaching that a silicon elastomer compounded with metallic pigments is an equivalent to a polyurethane polymer compounded with metallic pigments in providing reflectance values in the range for visual and infrared camouflage is in direct contradiction to the presently claimed invention, as recited in claims 37, 55 and 56. As discussed above, the present invention teaches that that silicon elastomers are not the functional equivalent of polyurethane polymers for purposes of a visual-optical camouflage coating, that is, for the purpose of providing reflectance values in the range for visual camouflage, because the reflectivity, that is, the "glisten", of the silicon elastomers is so much higher than that of polyurethane polymers.

For the above discussed reasons, therefore, Hellwig et al. `820 teaches directly away from the presently claimed invention as recited in claims 37, 55 and 56, and possibly even describes an unworkable embodiment with respect to the present invention in that the present invention teaches that silicon elastomers are <u>not</u> the equivalents of polyurethane polymers for the purposes of a visual-optical camouflage coating and have undesirable characteristics when used in visual-optical camouflage coatings.

The present invention is therefore fully and patentably distinguished over and from the teachings of Hellwig et al. `820 by requiring the use only of polyurethane polymers or polyvinylidene fluoride (PVDF) in the visual-optical camouflage coating, in teaching that silicon elastomers are not the visual-optical equivalent of polyurethane polymers, and in teaching that silicon elastomers have undesirable visual-optical characteristics.

In still further distinction between the present invention as recited in claims 37, 55 and 56 and the teachings of Hellwig et al. `820, claims 37, 55 and 56 require that the thermal camouflage coating consist of a silicone elastomer or a polyurethane, or both, containing aluminum powder and that the surface of the thermal camouflage coating facing toward the heat source be smooth relative to the texture of the inner side of the base textile. As described, the smoothness of the surface of the thermal camouflage coating increases the thermal reflectivity of the thermal camouflage sheet toward the heat source and improving the thermal camouflage effects of the sheet.

The present invention as recited in claims 37, 55 and 56 is thereby further fundamentally distinguished over and from the teachings of Hellwig et al. `820 because Hellwig et al. `820 does not describe, discuss or even mention the effects the reflectivity characteristics of the thermal camouflage coating have on the thermal camouflage coating and the effectiveness of the thermal camouflage coating in hiding a heat source.

In still further distinction between the present invention as recited in claims 37, 55 and 56 and the teachings of Hellwig et al. `820, it must be noted that according to Hellwig et al. `820 the thermal camouflage layer of the thermal camouflage tarpaulin consists of a free-standing layer (2) of polyester film that is adhered to the base textile (1) by a polyurethane or silicone adhesive layer (4) and that the polyester film is coated with a vapor-deposited thermally reflective coating (3), such as vapor deposited aluminum.

The structure of Hellwig et al. `820's thermal camouflage layer is thereby completely different from that of the thermal camouflage coating of the present invention, as recited in claims 37, 55 and 56, which consists of a silicone elastomer or a polyurethane, or both, containing aluminum powder and wherein the surface of the thermal camouflage coating facing toward the heat source be smooth relative to the texture of the inner side of the base textile.

The thermal camouflage coating of the present invention as recited in the claims is thereby a single layer structure while, in complete contrast from the present invention, the thermal camouflage structure taught by Hellwig et al. `820 is comprised of three layers, that is, the layer of polyester film, the layer of adhesive attaching the layer of polyester film to the base textile, and the layer of vapor deposited aluminum.

It must also be noted that this distinction extends to the entire structure of the camouflage sheet of the present invention as recited in claims 37, 55 and 56 as compared to the camouflage tarpaulin structure taught by Hellwig et al. `820. That is, the camouflage sheet recited in claims 37, 55 and 56 contains three elements, the base textile, the outer visual-optical camouflage coating and the inner thermal camouflage coating. In complete contrast, the structure taught by Hellwig et al. `820 comprises five layers that consist of a base textile, an outer visual-optical-thermal camouflage layer, and a thermal camouflage layer comprised of the polyester film, the layer of adhesive and the layer of vapor deposited aluminum.

In summary, therefore, it is the Applicant's position that the present invention as recited in claims 37, 55 and 56 is fully and patentably distinguished over and from the teachings of Hellwig et al. `820 under the requirements and provisions of 35 U.S.C. § 102 and/or 35 U.S.C. § 103 for at least the reasons discussed above.

Therefore next considering the combination of DE `362 in view of Hellwig et al. `820, it is noted that the Examiner cites Hellwig et al. `820 with regard to Hellwig et al. `820's use of polyurethane in the visual-optical and thermal camouflage layers of the Hellwig et al. `820 camouflage tarpaulin. The Examiner states that it would have been obvious to use the polyurethane polymers taught by Hellwig et al. `820 in place of the silicon elastomers of the camouflage fabric taught by DE `362.

As discussed above, DE `362 describes the use of only silicon elastomers to form the visual-optical and thermal camouflage coating of the DE `362 camouflage fabric, and has no teaching, discussion or even mention of other materials, such as polyurethane polymers, or of the effects of the reflectivity of various materials on the visual-optical camouflage characteristics of the materials. Hellwig et al. `820, in turn, teaches that the outer visual camouflage coating (5) may be formed of either a polyurethane polymer or silicon elastomer and teaches that these materials are equivalent to one another for the purpose of constructing a visual-optical camouflage coating. In addition, Hellwig et al. `820, like DE `362, does not discuss or even mention the differences in visual-optical reflectivity between polyurethane polymers and silicon elastomers and does not distinguish between these materials as regards their reflectivity properties or their uses as a visual-optical camouflage coating.

Based purely on the teachings of DE' 362 and Hellwig et al. `820 and the combination of their teachings, that is, without reference to the teachings of the present invention, the only concurrence between the teachings of DE `362 and Hellwig et al. `820 in this regard is the use of silicon elastomers in both the visual-optical and the thermal camouflage coating of a camouflage sheet or fabric. In addition, and since neither DE' 362 nor Hellwig et al. `820

discusses or mentions the reflectivity characteristics of polyurethane polymers or polyvinylidene fluoride compared to those of silicon elastomers or the effects of the differences on the camouflage characteristics of coatings made from polyurethane polymers as opposed to silicon elastomers, neither DE' 362 nor Hellwig et al. `820 provides any motivation for selecting a polyurethane polymer instead of a silicon elastomer for a camouflage coating.

It is clear, therefore, that the logical result of a combination of the teachings of Hellwig et al. `820 with those of DE `362 would be the use of silicon elastomers for the construction of the visual-optical and thermal camouflage coatings of a camouflage sheet or fabric, rather than a polyurethane polymer. This is directly contrary to the present invention as taught in the specification and as recited in the claims, so that the combination of DE `362 and Hellwig et al. `820 would teach directly away from the present invention as recited in the claims.

The present invention as recited in claims 37, 55 and 56 is further fundamentally distinguished from a combination of DE `362 in view of Hellwig et al. `820 as regards the thermal camouflage coating of the present invention compared to shoe of DE `362 and Hellwig et al. `820. That is, the present invention as recited in claims 37, 55 and 56 requires that the thermal camouflage coating consist of a silicone elastomer or a polyurethane polymer, or both, containing aluminum powder and that the surface of the thermal camouflage coating facing toward the heat source be smooth relative to the texture of the inner side of the base textile. As described, the smoothness of the surface of the thermal camouflage coating increases the thermal reflectivity of the thermal camouflage sheet toward the heat source and improving the thermal camouflage effects of the sheet.

In contrast, DE `362 states that the inner side thermal camouflage coating comprises a silicon elastomer containing thermally reflective powdered aluminum while Hellwig et al. `820 states that the thermal camouflage layer consists of a free-standing layer of polyester film that is adhered to the base textile by a polyurethane or silicone adhesive layer and that the polyester film is coated with a vapor-deposited thermally reflective coating, such as vapor deposited aluminum. As discussed above, neither DE `362 nor Hellwig et al. `820 teaches or suggests the thermal camouflage coating of the present invention as recited in claims 37, 55 and 56.

Therefore considering a combination of DE `362 and Hellwig et al. `820 with respect to a thermal camouflage coating, it must first be recognized that DE `362 and Hellwig et al. `820 teach entirely different structures, which severely limits the possible combinations that could rationally result from a combination of elements taken from the two reference.

As described, DE `362 teaches a thermal coating consisting of single layer structure containing the thermally reflecting metallic powder while Hellwig et al. `820 teaches a multi-layer

construction, that is, a polyester film having a vapor deposited metal film and bonded to the base textile by an adhesive layer. One possible logical combination of Hellwig et al. `820 with DE `362 would be a camouflage sheet comprised of the base textile and visual-optic layers of DE `362 with the single layer thermal camouflage layer of DE `362 being replaced by the multi-layer thermal camouflage structure as taught by Hellwig et al. `820. It is apparent, however, that this combination has no relevance to and does not teach or suggest the thermal camouflage coating of the present invention. Another possible logical combination would be a camouflage sheet comprised of the base textile and visual-optic layers of DE `362 with a single layer of silicon elastomer or polyurethane but wherein the metallic powder contained in the silicon elastomer or polyurethane, as taught by DE `362, is replaced by a vapor deposited metallic film, as taught by Hellwig et al. `820.

It is apparent, however, that a combination of the thermal camouflage layer teachings of DE `362 combined with selected aspects of the thermal camouflage teachings of Hellwig et al. `820 would not result in the thermal camouflage layer or coating recited in claims 37, 55 and 56, even if the silicon elastomer of DE `362 were to be replaced with polyurethane.

In fact, not only is the present invention as recited in claims 37, 55 and 56 the only source of a teaching for the recited combination, but the present invention is the sole source of any motivation or reason for making such a combination.

It is, therefore, the Applicant's position that the present invention as recited in claims 37, 55 and 56 is fully and patentably distinguished over and from the teachings and suggestions of DE `362 and Hellwig et al. `820 and the combination of DE `362 in view of Hellwig et al. `820 under the requirements and provisions of 35 U.S.C. § 103 and/or 35 U.S.C. § 102. The Applicant, therefore, respectfully requests that the Examiner reconsider and withdraw the rejections of claims 37, 55 and 56 in view of Hellwig et al. `820 and the combination of DE `362 in view of Hellwig et al. `820, and allow claims 37, 55 and 56 as amended herein above.

In addition, claims 39, 41-44 and 48-54 are each directly or indirectly dependent form claim 37 and thereby incorporate all recitations and limitations of claim 37 by dependence therefrom. Claims 39, 41-44 and 48-54 are thereby fully and patentably distinguished over and from DE `362 and Hellwig et al. `820 and the combination of DE `362 in view of Hellwig et al. `820 under the requirements and provisions of 35 U.S.C. § 103 for the same reasons that claim 37 is patentably distinguished over and from DE `362 and Hellwig et al. `820 and the combination of DE `362 in view of Hellwig et al. `820. The Applicant, therefore, respectfully

requests that the Examiner reconsider and withdraw all rejections of claims 38, 39, 41-44 and 48-54 and allow of claims 39, 41-44 and 48-54.

Next considering the rejection of claims 45-47 under 35 U.S.C. § 103(a) over DE `362 in view of Hellwig et al `487 and in further view of McKinney et al. `645, DE `362 and Hellwig et al. `487 (Hellwig et al. `820) are discussed in detail above and the Applicant respectfully requests that the above discussions concerning DE `362 and Hellwig et al. `820 be considered as incorporated into the following discussions. DE `362 and Hellwig et al. `820 and will, therefore, not be discussed in detail in the following except as necessary to point out the distinctions of claims 45-47 over the cited combination of prior art references.

First, claims 45-47 are all directed to aspects of crosslinking of the polyurethane in the visual-optical and thermal camouflage coatings and are each directly or indirectly dependent from claim 37 and thereby incorporate all recitations and limitations of claim 37 by dependence. Claims 45-47 are thereby distinguished over and from DE `362 and Hellwig et al. `820 for the same reason that claim 37 is distinguished over and from DE `362 and Hellwig et al. `820, so that the sole issue for consideration is the result of the combination of the teachings of McKinney et al. `645 with those of DE `362 and Hellwig et al. `820.

McKinney et al. `645 describes a tenting fabric comprised of a woven synthetic base textile having coatings on each side wherein each of the coatings is comprised of a base coat comprised of polyurethane binder containing fire retardant compounds and a top coat comprised of a polyvinyl binder containing fire retardants and water and UV resistant compositions, and the Examiner cites McKinney et al. `645 as teaching the use of crosslinkers.

McKinney et al. `645 may therefore have some relevance to the recitations of claims 45-47 pertaining to crosslinking, but has no relevance to the incorporated recitations and limitations of claim 37 pertaining to the structure and materials of the visual-optical and thermal camouflage coatings.

In particular, McKinney et al. `645 does not describe or even suggests any aspects of providing visual-optical or thermal camouflage and, more specifically and like DE `362 and Hellwig et al. `820, does not teach or suggest any aspects of the visual-optical camouflage coating of the present invention or any aspects of the thermal camouflage coating of the present invention.

In particular, and like DE `362 and Hellwig et al. `820, McKinney et al. `645 does not describe or suggest a visual-optical camouflage coating consisting of polyurethane or polyvinylidene fluoride (PVDF) and containing color pigments with the remission values of the color pigments being in the range of visual-optical camouflage.

In a like manner, and again like DE `362 and Hellwig et al. `820, McKinney et al. `645 does not describe or suggest a thermal camouflage surface coating consisting of a silicone elastomer or a polyurethane, or both, and containing aluminum powder wherein one side of the second thermal camouflage surface coating faces toward the heat source and is smooth relative to the texture of the inner side of the base textile, thereby increasing a thermal reflectivity of the thermal camouflage sheet toward the heat source and improving the thermal camouflage effects of the sheet.

For at least these reasons, therefore, the combination of DE `362 and Hellwig et al. `820 in further view of McKinney et al. `645 does not teach of suggest at least the recitations and limitations of claim 37 that are incorporated into each of claims 45-47 by dependence therefrom. It is, therefore, the Applicant's position that the present invention as recited in claims 45-47 is fully and patentably distinguished over and from the teachings and suggestions of DE `362 and Hellwig et al. `820 and McKinney et al. `645 and the combination of DE `362 and Hellwig et al. `820 in further view of McKinney et al. `645 under the requirements and provisions of 35 U.S.C. § 103. The Applicant, therefore, respectfully requests that the Examiner reconsider and withdraw the rejections of claims 45-47 and allow claims 45-47.

Lastly considering the rejection of claims 40 and 56 under 35 U.S.C. § 103(a) over DE `362 in view of Hellwig et al. `487 and further in view of Bussiere `371, DE `362 and Hellwig et al. `487 (Hellwig et al. `820) are discussed in detail herein above and the Applicant respectfully requests that the above discussions concerning DE `362 and Hellwig et al. `820 be considered as incorporated into the following discussions. DE `362 and Hellwig et al. `820 and will, therefore, not be discussed in detail in the following except as necessary to point out the distinctions of claims 40 and 56 over the cited combination of prior art references.

First, claim 40 recites limitations pertaining to the structure of the base textile and is indirectly dependent from claim 37, so that claim 40 thereby incorporate all recitations and limitations of claim 37 by dependence. Claim 40 is thereby distinguished over and from DE `362 and Hellwig et al. `820 for the same reason that claim 37 is distinguished over and from DE `362 and Hellwig et al. `820. Claim 56, which has been discussed in detail herein above, is an independent claim including the recitations and limitations of claim 37 and is thereby distinguished over and from DE `362 and Hellwig et al. `820 for the reasons discussed herein above. The sole issue for consideration is the result of the combination of the teachings of Bussiere `371 with those of DE `362 and Hellwig et al. `820 with regard to claims 40 and 56.

The Examiner cites Bussiere `371 as describing a glass fiber textile having binding threads formed into a twill weave and against the recitations referring to twill weaves in

claims 40 and 56. Bussiere `371 may have some relevance to the recitations of claims 40 and 56 with respect to the use of twill weave patterns in the base textile, but has no relevance to the recitations and limitations of claim 40 that are incorporated from claim 37 and that pertain to the structure and materials of the visual-optical and thermal camouflage coatings, or to the recitations of claim 56 that pertain to the structure and materials of the visual-optical and thermal camouflage coatings.

In particular, Bussiere `371 does not describe or even suggests any aspects of providing visual-optical or thermal camouflage and, more specifically and like DE `362 and Hellwig et al. `820, does not teach or suggest any aspects of the visual-optical camouflage coating of the present invention or any aspects of the thermal camouflage coating of the present invention.

In particular, and like DE `362 and Hellwig et al. `820, Bussiere `371 does not describe or suggest a visual-optical camouflage coating consisting of polyurethane or polyvinylidene fluoride (PVDF) and containing color pigments with the remission values of the color pigments being in the range of visual-optical camouflage.

In a like manner, and again like DE `362 and Hellwig et al. `820, Bussiere `371 does not describe or suggest a thermal camouflage surface coating consisting of a silicone elastomer or a polyurethane, or both, and containing aluminum powder wherein one side of the second thermal camouflage surface coating faces toward the heat source and is smooth relative to the texture of the inner side of the base textile, thereby increasing a thermal reflectivity of the thermal camouflage sheet toward the heat source and improving the thermal camouflage effects of the sheet.

For at least these reasons, therefore, the combination of DE `362 and Hellwig et al. `820 in further view of Bussiere `371 does not teach of suggest at least the recitations and limitations of claims 40 and 56 that pertain to the structure of either the visual-optical camouflage coating or the thermal camouflage coating. It is, therefore, the Applicant's position that the present invention as recited in claims 40 and 56 is fully and patentably distinguished over and from the teachings and suggestions of DE `362 and Hellwig et al. `820 and Bussiere `371 and the combination of DE `362 and Hellwig et al. `820 in further view of Bussiere `371 under the requirements and provisions of 35 U.S.C. § 103. The Applicant, therefore, respectfully requests that the Examiner reconsider and withdraw the rejections of claims 40 and 56 and allow claims 40 and 56.

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejection(s) should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejection(s) or applicability of the Lorenz `362, Hellwig `487, McKinney et al. `465 and/or Bussiere `371 references, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,

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